LTC 8x00 Series Allegiant Systems

Security Systems

- Models from 8 camera by 2 monitor to 32 camera by 6 monitor
- Compact single bay construction
- Integral alarm interface and signal distribution
- Powerful alarm handling features
- Salvo switching and satellite switch capability
- PC based software package available

The LTC 8100 Series, LTC 8200 Series, and LTC 8300 Series Allegiant video switcher/control systems combine both switching and computer technology to provide powerful performance and unique system features for the security user. Offering full matrix switching capability, these systems can be programmed to display the video from any camera on any monitor, either manually or via independent automatic switching sequences.

Functions

These systems provide from 8 camera inputs, 2 monitor outputs to 32 camera inputs, 6 monitor outputs, 2 to 4 keyboards, 8 to 32 direct connect alarm input points, an integral signal distribution unit, and a computer interface port. A logging printer port is available in the LTC 8300 Series systems.

These systems can be programmed with up to 60 sequences which can be run independently of each other in either a forward or reverse direction.

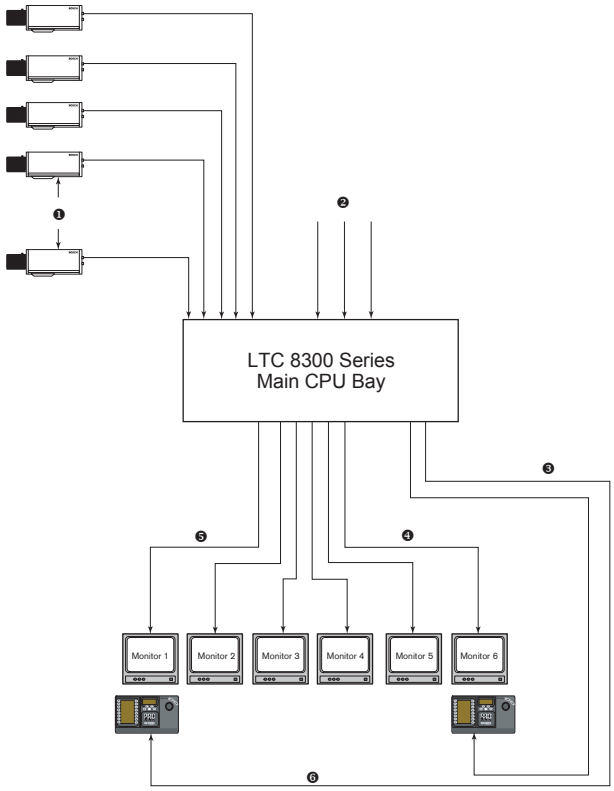
Any of the sequences can utilize the SalvoSwitching capability where any number of system monitors may be selected to switch as a group. Using the optional LTC 8059/00 Master Control Software package or the LTC 8850/00 Bosch Graphical User Interface (GUI) Allegiant Server, sequences can be made to activate and deactivate automatically based upon the time of day and the day of week.

Utilizing the unit's integral signal distribution ports, connections to on-site receiver/drivers are easily made. On-site receiver/drivers provide operator control of pan, tilt, zoom, multiple pre-positions, four auxiliaries, auto-pan, and random scan. These systems also support variable speed operation and full programming functions of AutoDome series dome cameras.

When combined with an LTC 8016 Allegiant Bilinx Data Interface unit, these switcher/controllers support operations using Bilinx communication. With Bilinx, PTZ control is accomplished using a bidirectional communication protocol embedded in the video signal of Bosch Dinion and AutoDome CCTV cameras. In addition, Bilinx uses the standard video cable to transmit alarm and status messages from the cameras, providing superior performance without the need for separate data transmission cables.

With their built-in alarm interface capability, an external contact closure or logic level can be used to automatically activate any camera to be displayed. Any monitor or group of monitors can be set to display cameras under alarm conditions.
The base system contains three built in alarm response modes: basic, auto-build, and sequence and display. In addition to these three modes, the PC based software packages offer VersAlarm a new dimension in alarm handling. VersAlarm has the ability to combine any or all of the three standard modes within the same system. Alarm video may be selected to reset either manually or automatically. In addition, a 16-character alarm title can be selected to appear instead of the camera title during alarm conditions.
System operation and programming is accomplished using a full function, ergonomically designed keyboard (sold separately). Built-in operator priority levels and the ability to restrict certain operators from controlling designated functions provide maximum flexibility.
These systems include a black outlined 48-character on-screen display for time-date, camera number, camera ID (16-characters), an icon to identify controllable cameras, and monitor (12-characters) or status information. Over 235 characters are available when programming camera ID and monitor titles.
Utilizing a standard IBM* compatible PC and the optional LTC 8059/00 Master Control Software package or LTC 8850/00 GUI software, enhanced programming and switching features can be obtained. A user-friendly spreadsheet format provides the ability to enter camera titles, operator names, 64 timed events, change system parameters, program camera sequences, install lockouts, and access the advanced VersAlarm alarm handling screens with speed and efficiency.
The programmed information may then be transferred into the Allegiant system, stored on disk, or printed out directly from a printer connected to the PC.
The LTC 8850/00 Bosch GUI software is designed around an intuitive graphic based interface. The GUI provides high performance programming, control and monitoring of all system functions by using on-screen icons to reflect real time status of the devices controlled by the system.
The LTC 8850/00 GUI software also provides the ability to monitor system status events. System alarms, switching functions, sequence events, keyboard actions, and video loss information can be viewed in real time on the PC screen and, if desired, logged to the PC hard drive.
The software also provides the ability to enable an on-screen indicator for easy identification of controllable cameras.
The LTC 8300 Series contain a logging printer output port which accepts a standard RS-232 serial printer. This provides a permanent record of system status showing time and date of changes such as: incoming alarms, acknowledgment of alarms, loading of sequences, user log-on to keyboard, transfer of system tables and sequences, video loss messages, and a power up reset message. In addition, the printer can be used to obtain a hard copy of the system's configuration tables and sequences.
These systems provide powerful macro capabilities. The macros can be activated using LTC 8554 Series and LTC 8555 Series type keyboards, system time event functions, alarm activations, and via special function icons in the LTC 8850/00 GUI software.
These systems can serve as the master switcher in a SatelliteSwitch configuration. This innovative SatelliteSwitch feature enables a single system to communicate with remotely located "Satellite" systems. Any Allegiant system or LTC 5112 Series and LTC 5124 Series programmable sequential switcher can serve as a remote Satellite switcher. This powerful feature permits the design of a distributed matrix video switching system with control at one central location and individual control at the local sites. The main control site can view/control local cameras plus cameras located at any of the remotely distributed Satellite sites. The Satellite sites can view/control only cameras associated with their own site.
When used in this type of configuration, the main system can access up to 256 cameras located anywhere in the system.
Windows is a registered trademark of Microsoft Corp.

Installation/Configuration Notes



Typical LTC 8300 Series Configuration Diagram

1 Additional System Cameras

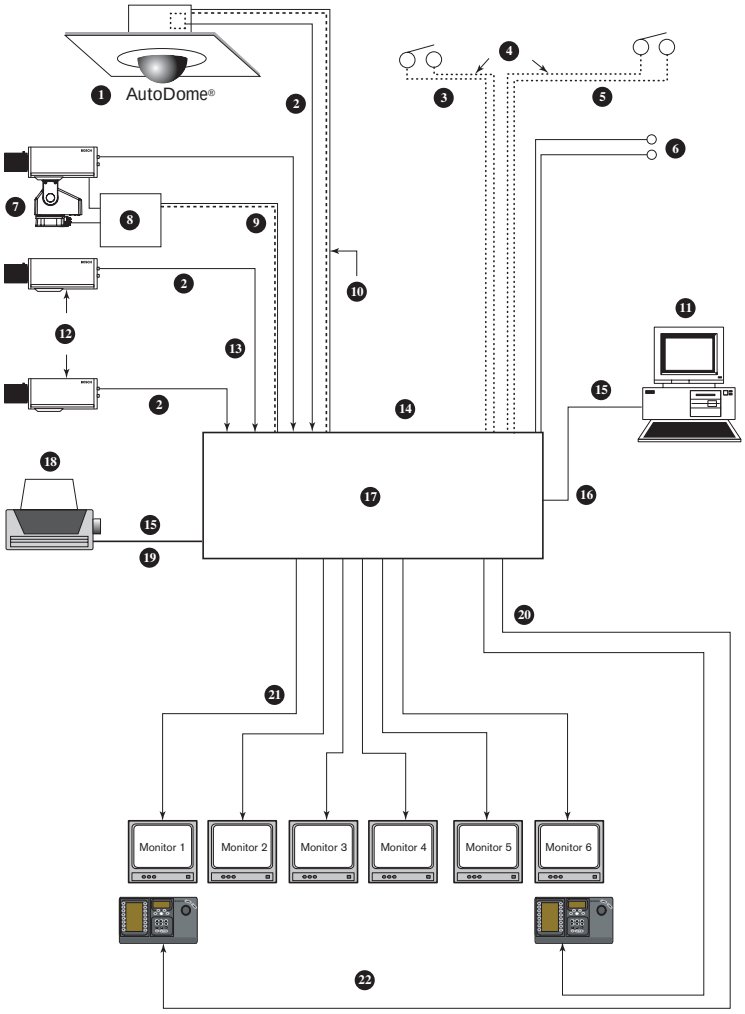
2 Up to 32 Video Inputs Maximum

3 3 m (10Ft) Interconnect cable supplied with Keyboard

4 Video Coax

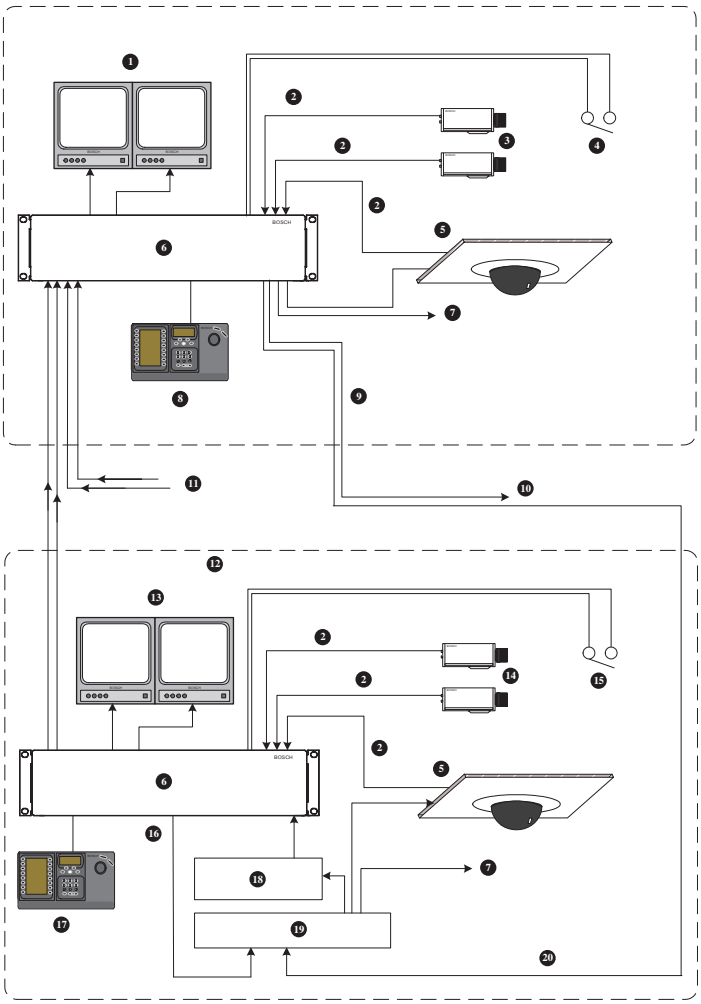
5 Up to 6 Monitor Outputs

6 Maximum of 4 Allegiant Series Full Function Keyboards up to 1.5 km (5000Ft) away using optional remote hookup Kit



LTC 8300 Series Full Capacity Configuration Diagram
(32 Cameras by 6 Monitors)

01	Typical Autodome Camera	12	Additional System Cameras
02	Video Coax	13	Up to 32 Receiver/Driver Units
03	Twisted-Pair Typical	14	4 Separate Outputs
04	32 Separate Alarm Inputs	15	RS-232 Data
05	Contact Closure or Active Low Logic Level	16	3m (10ft) Interface Cable provided with Optional Software Package
06	6 pairs of relay outputs	17	LTC 8300 Series Main CPU Bay
07	Pan & tilt	18	Serial Logging Printer Capability
08	Receiver/Driver	19	3 m (10ft) Interface cable provided with LTC 8500/50 Main CPU Bay
09	Up to 32 Receiver/Driver Units	20	3m (10ft) Interconnect Cable Supplied with Keyboard
10	Up to 1,5 km (5000ft) Using 18 AWG Shielded Twisted Pair Cable (Belden 8786 or Equivalent)	21	Up to 6 Monitor Outputs
11	Optional LTC 8059/00 Master Control Software or LTC 8850/00 Graphical User Interface (GUI) Software Package can be Run on Windows® based PC.	22	Maximum of four Allegiant Series Full Function Keyboards up to 1.5km (5000ft) away using optional Remote Hookup Kit



Typical Main Allegiant Control Center

01	Typical System Monitors (Local and/or Remote Video)	11	Incoming Video TRUNK Lines From All Satellite Sites	06	Typical LTC 8100, LTC 8200, or LTC 8300 Allegiant System	16	Biphase Data
02	Video	12	Typical Allegiant Satellite Site	07	Biphase Data Lines to All Local P/T/Z Camera Sites	17	IntuiKey Keyboard (P/T/Z Control of Local Cameras Only)
03	Typical Fixed Cameras	13	Typical Local Monitors (Local Video Only)	08	Typical IntuiKey Keyboard	18	LTC 8780 Data Converter
04	Typical Alarm Input Contact to Activate Local or Satellite Cameras	14	Typical Fixed Cameras	09	Biphase Control and Satellite Switching Data	19	LTC 8569 Code Merger
05	Typical Controllable Camera	15	Typical Alarm Input Contact (For Local Alarms Only)	10	1 Biphase Data Line to Each Remote Satellite Site	20	Biphase Control + Satellite Data

Technical Specifications

System Capacities

Model No.	LTC 8100 Series	LTC 8200 Series	LTC 8300 Series
Video Inputs-Standard	8	16	32
Video Inputs-Looping	8	16	32
Video Inputs-Satellite	256	256	256
Video Outputs	2	5	6
Alarm Inputs	8	16	32
Alarm Outputs	2	5	6
Bi-phase Outputs	8	12	16
Keyboards	2	4	4
RS-232 Ports-Console	1	1	1
RS-232 Ports-Printer	0	0	1
Receiver/Drivers-Standard	8	16	32
Receiver/Drivers-Satellite	256	256	256

Electrical

Input Voltage Level	0.5 Vp-p to 2 Vp-p (Composite Negative Sync).
Gain	Unity ± 2% (75 ohm terminated).
Pulse/Bar Ratio	1 94% to 106%.
2T Pulse K Factor	2.5% maximum. [1]
Bar Amplitude	1 96% to 104%.
Field Time Waveform Distortion	1-2% maximum.
Line Time Waveform Distortion	1 1% maximum.
Short Time Waveform Distortion	maximum.
Video Bandwidth (-3 dB)	25 MHz.
Frequency Response	± 1.0 dB to 12 MHz.
Signal-to-Noise	1 60 dB at 3.58 MHz Unweighted minimum.
Crosstalk (Typical at 3.58 MHz)	
Adjacent Channel	-55 dB.
Differential Gain	2% maximum. [1]
Differential Phase	1.3° maximum [1]
Chrominance Luminance Gain	1 96% to 104%.
Chrominance Nonlinear Phase	1.2° maximum.
Luminance Nonlinearity	4% maximum. [1]
Switching:	Crosspoint matrix.
DC Output	0 V.

1. Meets EIA/TIA - 250C Medium Haul Standard.

Environmental

Temperature:	
Operating	+4 °C to +55 °C (+40 °F to +131 °F).
Storage	-40 °C to +60 °C (-40 °F to +140 °F).
Altitude	4500 m (15,000 ft).
Humidity	0% to 95% relative, noncondensing.

Electrical - LTC8100, LTC8200, LTC8300 Series Bay

Model No.	Rated Voltage	Voltage Range	Nominal Power[1]
LTC 8100/50	230 Vac 50/60 Hz	195.5 to 253	10 W
LTC 8100/60	120 Vac 50/60 Hz	108 to 132	10 W
LTC 8200/50	230-240 Vac 50/60 Hz	195.5 to 253	10 W
LTC 8200/60	120 Vac 50/60 Hz	108 to 132	10 W
LTC 8300/50	230-240 Vac 50/60 Hz	195.5 to 253	10 W
LTC 8300/60	120 Vac 50/60 Hz	108 to 132	10 W

1. Power at rated voltage fully loaded.

Connectors:

Video Inputs and Monitor Outputs	BNC.
Looping Video Connections:	
LTC8100 Series	8 BNC.
LTC8200 Series	One 34-pin ribbon connector used in conjunction with the LTC 8808/00 video interconnect panel (not included).
LTC8300 Series	Two 34-pin ribbon connectors used in conjunction with the LTC 8808/00 video interconnect panel (not included).
External Accessory Interfaces:	
CONSOLE	RS-232 port for external PC or control interface (Default = 19,200 baud).9-pin D-type connector.
ALARMS	Inputs use removable screw terminal connectors. Relay outputs provide alarm output connections. (Contact rating = 1.5A at 30 VDC).
PRINTER (LTC8300 Series only)	RS-232 port for system logging printer (Default = 19,200 baud).9-pin D-type
Connector	
BI-PHASE OUT	Multiple ports provide receiver/driver connections when used in daisy chain configuration. Removable screw terminal connector blocks.
KEYBOARDS	6-pin RS-485 ports for Allegiant keyboard use.

Mechanical	
Construction	Steel chassis with sheet metal cover and plastic bezel.
Finish	Charcoal.
Dimensions:	
LTC8100, LTC8200 Series	440 W x 305 D x 40 H mm (17.3 x 12 x 1.7 in).
LTC8300 Series	440 W x 305 D x 89 H mm (17.3 x 12 x3.5 in).
Weight:	
LTC8100, LTC8200 Series	4 kg (8.8 lb).
LTC8300 Series	4.8 kg (10.7 lb).
Rack Mount (Integral)	Brackets for mounting one unit in an EIA 19-inch rack.
LTC8100, LTC8200 Series	One standard rack unit high.
LTC8300 Series	Two standard rack units high.
Electromagnetic Compatibility	
EMC Requirements	CE Immunity, CE Emission Class B, FCC Class B, ICES-003.
Safety	CE, UL, cUL.
Allegiant Accessories	
The Allegiant accessory products provide many optional features to the base Allegiant switching systems. Accessory products include keyboards, keyboard extension kits, receiver/driver units, switcher/followers, and code merger units. All accessory products are designed to be installer-friendly and compatible throughout the Allegiant series systems. See Allegiant accessories data sheet.	

Ordering Information
Model & Description
LTC 8100/50
Allegiant 8100, 230 Vac
LTC 8100/60
Allegiant 8100, 115 Vac
LTC 8200/50
Allegiant 8200, 230 Vac
LTC 8200/60
Allegiant 8200, 115120 Vac
LTC 8300/50
Allegiant 8300, 230 Vac, 16 bi-phase outputs
LTC 8300/60
Allegiant 8300, 115 Vac

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